

# OSS NEWSLETTER

JANUARY, 1984

The management and staff at OSS would like to wish all of our users the very best for a Happy New Year. In addition we would like to thank you for your support and patronage throughout 1983. In 1984 we will be introducing a new line of Commodore products as well as expanding our current line of Atari software. OSS will continue to bring you quality products and technical support throughout 1984.

## PRODUCTS FOR THE NEW YEAR

### ACTION! ACTION! ACTION!

Our first and second runs of ACTION! were complete sell-outs! We are pleased to announce that we now have a sufficient supply of cartridges to fill your orders--we hope!

ACTION! is for the BASIC programmer who is ready to step up to a structured, compiled language. A straightforward, easy-to-use language (with roots in C and Pascal) with a superb built-in screen editor, ACTION! allows you to put the "bells and whistles" into your programs. Since your time is valuable, ACTION! gives you speed, without resorting to lengthy assembly language programming.

ACTION!'s incredible speed and remarkable versatility make it the most powerful tool ever for Atari computers. Benchmark tests show ACTION! even outperforms high level languages on the IBM PC! Since it is 100's of times faster than BASIC, you can even use it to write animated arcade games.

We are not just tooting our own horn. Critics who have reviewed ACTION! have also been praising its speed and versatility. Atari user groups who received advance copies and demo disks have been unanimous in their admiration of this great new product.

Here are some quotes from one reviewer: "Once again words have failed me. Nothing is like the ACTION! experience. It's simply awesome!" [With ACTION!] "you have ... low-level control and speed; and because you write a routine at a time and even a long routine will compile in a few seconds, you have interaction as well. It is like you are inside the machine when you get going with it."

And watch for full reviews in ANTIC magazine and HI-RES magazine (both sometime in early 1984).

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### ACTION! PROGRAMMERS' AID DISK

The Programmers' Aid Disk, designed exclusively for ACTION! programmers, contains a useful library of subroutines to access special Atari features such as player-missile graphics and floating point numbers. Some helpful routines, written in ACTION!, are also included to do such things as formatted print, extended disk I/O, and more. This disk also contains several demonstration programs (including a couple of very playable games) written in ACTION! to aid

you in learning the language. The programs and examples on the Programmers' Aid Disk normally require the ACTION! cartridge. By also using the runtime disk, these ACTION! programs can run on any Atari computer.

Programs or routines on the Programmers' Aid Disk include:

ALLOC.ACT — this group of routines allow you to allocate and free blocks of memory at run-time.

CIRCLE.ACT — a fast circle drawing routine which doesn't use sine or cosine.

IO.ACT — a group of routines which implement extended Input/Output functions such as rename, protect, unprotect, etc.

MISC.ACT — a group of miscellaneous routines including character test functions (uppercase, lowercase, digit) and modified joystick functions.

PMG.ACT — routines designed to make player/missile graphics easy to use, including routines to: enable or disable P/M graphics, set the hue and luminance of a specified P/M, return the address of a given P/M's memory block, clear out a specified P/M's memory block, and move a specified P/M.

PRINTF.ACT — a Printf procedure which is far more advanced than the Library Printf, including field size specification, field justification, zero fill, and redirection of output to a specified channel (much like the standard C printf).

REAL.ACT — a group of routines which allow you to use floating point (real) numbers in ACTION!. Both arithmetic and I/O routines for F.P. numbers are included.

TURTLE.ACT — a group of routines which implement turtle graphics ala Logo.

GEM.ACT — a video game using both character and P/M graphics.

SNAILS.ACT — a video game similiar to "SURROUND". This game was originally written in BASIC and then translated to ACTION! (so you know that it can be done).

KALSCOPE.ACT — a kaleidoscope program which demonstrates ACTION!'s amazing speed and graphics capabilities.

Each of these files have an accompanying documentation file (labelled .DOC) which describes each in some detail.

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### BASIC XL

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Apparently, BASIC XL was exactly what many of you were waiting for. Like ACTION!, our first run of BASIC XL was sold out before it was released. In addition, we ran into problems we never anticipated. As publishers of

software, there are many phases in our production process.

First, the system and then the documentation to accompany it must be written. We set deadlines and add two weeks to allow for problems. Advertisements must be placed in magazines three months ahead of schedule. Normally, we are close to our deadlines. With BASIC XL we ran into problems we have never encountered before: bad manuals that had to be returned to the printer and a hardware problem with the boards. We apologize for the resultant delay.

The response to BASIC XL has nonetheless been overwhelming. Many of our users have been delighted with the added features. Automatic line numbering, program renumbering, automatic string allocation, and string arrays make programming in BASIC XL easier for beginners as well as experienced programmers.

BASIC XL is even simpler to use and more dependable, because it includes such outstanding major additions as structured programming and PRINT USING. In addition, BASIC XL has enhanced input/output, improved graphics, and extensive business capabilities.

For the beginner and the experienced programmer alike, OSS BASIC XL is the precision software tool you need to keep complications out of your programming while allowing you to produce creative and intricate programs.

#### MAC/65

Many of you have been waiting for our new MAC/65 cartridge to be released. We anticipate that MAC/65 will be available on January 30th.

The new MAC/65 cartridge is an enhanced version of the disk product we have been selling for more than one year. The new version will have a few additional features including better printer control and a full cross-reference capability. MAC/65 also features a complete and comprehensive array of operators such as: +, \*, -, /, &, <, >, <=, >=, =, <>, !, .AND, .OR, .NOT, and more, including low-byte-of-address and high-byte-of-address in accordance with MOS Technology standard usage. MAC/65 even supports the NCR 65C02 CMOS microprocessor instruction set.

(If you would like to receive a spec sheet on the NCR 65C02 microprocessor chip, send your request with a self-addressed, stamped (20 cent), envelope large enough to hold several 8 1/2 by 11 sheets of paper to: 65C02 Spec Sheet, OSS, 1173D S. Saratoga/Sunnyvale RD., San Jose, CA 95129). If you are unfamiliar with MAC/65, there is an article entitled "Nightmare Mission" in the October issue of ANTIC magazine which compares MAC/65 to other assemblers currently on the market. David and Sandy Small indicate the reason why they chose OSS's MAC/65 over all the others.

One reason the Smalls selected our MAC/65 over the competitions' compilers was MAC/65's speed. MAC/65 can do memory to memory assemblies at the rate of thousands of lines per minute. Even disk to disk assemblies proceed at hundreds of lines per minute...as much as 25 times faster than the Atari assembler/editor cartridge.

In addition, MAC/65 takes the drudge work out of assembly language. By building macro libraries, you can easily write readable code. You can readily find out how many arguments were passed to a macro, extract the length of a

string argument, find out if a label has been defined and/or referenced, and much more. Naturally, you may use nested macros, powerful conditional assembly directives (.IF, .ELSE, .ENDIF), listing controls, included files, and other control and formatting directives.

### SuperCartridge

If you have been complaining about not having enough ram space for your programs, the new SuperCartridge from OSS can alleviate that problem. Thanks to some sophisticated memory bank management hardware, the OSS SuperCartridge allows the user to access the full power of a 16,000 byte language while occupying the memory space of an ordinary 8K cartridge.

Because our SuperCartridge can even turn itself off and on, the RAM normally occupied by a cartridge is available for other uses. DOS XL is specifically designed to take advantage of this added space, thus providing you with as much as 5K to 6K of additional RAM for your programs. Truly we can say that OSS gives you the power of a 16,000 language and a DOS while using as little as 3K of user space.

### DOS XL

DOS XL is the only DOS for Atari computers which lets you choose either an easy-to-use menu or a versatile command processor. When you use DOS XL in conjunction with the OSS SuperCartridge or the Atari XL computers, you also gain up to 5K of user memory. Finally, DOS XL gives you Atari DOS file compatibility while giving you the flexibility of running in either single or double density modes.

The DOS XL menu provides simple access to disk files and utilities. Unlike Atari DOS, the menu is resident so you need never wait for it to load from disk.

Or choose the power of the DOS XL command processor. DOS XL provides both resident and disk-based commands, even allowing you to add commands to the system. Plus, DOS XL provides a convenient method of batch processing.

If you own a SuperCartridge or an XL machine, DOS XL gives you an added bonus. By taking advantage of advanced memory management techniques, DOS XL saves you precious memory space. Even when using the menu, DOS XL with a SuperCartridge gives you more memory than Atari DOS without a menu!

Finally, if you own a disk drive produced by INDUS, TRAK, ASTRA, RANA, PERCOM, AMDEK, CONCORDE, or NCT, you will be glad to know that DOS XL is compatible with these units.

In our last newsletter, we neglected to tell you about two of our products. Perhaps, because we have been distributing them for more than a year, we think of their existence as common knowledge. The following is a brief description just in case you are not familiar with them.



## BUG/65

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Get one of the most powerful debuggers yet for your Atari computer. BUG/65 includes all the traditional debugging operations: display memory, change memory, disassembly, instant assembly and more. However, BUG/65 shows its real power with its single step and trace mode that even displays the status register in a readable fashion. In addition it has a breakpoint capability that allows for "conditional breakpoints" ( those that occur only if some register has some particular value).

BUG/65 is a stand-alone program which allows you to read files into memory (optionally with an offset), writes files, and read or write single sectors.

Still not enough? How about allowing BUG/65's output to go only to the printer, so any display you have on the screen will not be affected? And one more unique and powerful feature: BUG/65 can be loaded ANYWHERE in memory, so as not to disturb your program.

So why not make BUG/65 part of your software tools, and make debugging almost fun for a change!

## C/65

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Another FIRST from OSS!!! C/65 is the first commercially available C compiler for the Atari which actually produces assembly language output. C/65 is based on the "Small C" compiler, as published in DR. DOBBS JOURNAL. However, it has been restructured to enable it to run on and produce code for 6502 based machines.

C/65 is a usable subset of the powerful C language: it supports INTeGers and CHARacters, arrays thereof, and pointers thereto. Naturally, it also features full recursion, easy assembler interface, #INCLUDE, and a non-macro version of #DEFINE. Other variables available include: AUTOMATIC, global and EXTERNAL. Even though neither static nor initialized variables are directly supported, one may easily include assembly language code which effects the desired results. And the language DOES work: we have used it to write several new DOS commands.

Because C/65 produces a output file which is compatible with MAC/65, you must also have a copy of our very popular assembler. On the plus side, since the assembly language version of your C code is available to you, you can easily optimize specific code sections as you wish.

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**UPDATES**

As software is developed bugs are found, fixed and improvements are made. In order to provide you with the most up-to-date versions, OSS has the following update policy:

For ACTION! owners: to receive the most recent version of ACTION! you must send back your cartridge—not the manual—and a check or money order for \$20.00. California residents please include sales tax. No charge card orders will be accepted. The charge for this service reflects the actual cost to OSS.

Your update will include a new cartridge, binder, and new manual.

For MAC/65 owners: to receive the latest DISK version of MAC/65 you must send back your disk and a check or money order for \$20.00. California residents please add sales tax. No charge orders will be accepted on updates. The update will include a new disk, binder, and manual. Please note: this update is for the DISK version only.

For OS/A+ owners: to update OS/A+ to DOS XL, you must send us the first page of the OS/A+ manual and a check or money order for \$15.00. California residents please add sales tax. No charge orders will be accepted on updates. The update will include a 2-sided disk and a new manual.

PLEASE NOTE: we ran out of the beginner's manuals. Please do NOT send us any more checks for \$3.00 for this product.

ALSO PLEASE NOTE: we are no longer offering updates for 4.1 OS/A+. These were available at the time of our last newsletter for \$9.95. We anticipate being able to offer DOS XL version 4 in the not too distant future, but that project is on indefinite hold while higher priority projects are completed.

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#### RETURN POLICY

Effective immediately: any product returned to OSS must have a RMA (Return Merchandise Authorization) Number clearly marked on the front of the package. Returns which do not have an RMA number will be sent back to the owner.

To obtain a RMA number, call us at 408-446-3099 between 9:00 am and 4:00 pm Pacific Standard Time. Ask for the Return Desk.

Returns must be made within 30 days from the invoicing date. Products returned for refund are subject to a 15% restocking fee.

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#### SOFTWARE AUTHORS:

OSS pays some of the best software royalties in the industry, and we like to think our products reflect this. Some of our authors earn quite substantial sums for the OSS products you like and use.

As a software publisher, OSS can help you take the risk out of marketing your product. We at OSS estimate that it takes a minimum of \$15,000 to bring a new software product to market; but, if your software is accepted for publication by OSS, you bear none of the financial burden of preparing and printing documentation, preparing advertising artwork, placing magazine advertising, duplicating the disk(s) or cartridge(s), or any of myriad other costs involved in becoming a start-up in the software jungle.

OSS is looking for products that are high level systems or languages. We would be interested in microcomputer word processors, data bases, and business software. At this time, we are not marketing any games, but we are impressed by quality in any form, so we welcome your submissions here as well.

If you have developed one of the above mentioned products and would like us to review it, please send us a copy of the disk and any documentation that is

available. Upon request, a nondisclosure agreement will be sent to you in advance.

## TECHNICAL SUPPORT

The technical staff at OSS is happy to answer all of your questions. However, their expertise is needed to improve current products and to develop new ones. As a result, we have found it necessary to change their phone hours to the following:

Monday through Friday 9:30 to 12:00 a.m. and 1:30 to 4:30 p.m. PACIFIC TIME.  
Our phone number is 408-446-3099.

## SPEAKING OF MAIL

As we announced in the last issue of our newsletter, we have moved. Our new address is :

OSS  
1173D S. SARATOGA/SUNNYVALE RD.  
SAN JOSE, CA 95129

In the process of moving a box containing mail was lost. Recently it was returned to us. We are in the process of answering your letters. If you have not heard from us, please call during the above technical hours or rewrite your letter. We apologize for all the inconvenience, but the move really disrupted our office procedures.

If writing to us is more convenient for you, it would help us a great deal if your letters included the following:

- 1) Your name and complete address printed on the letter itself—not just on the envelope.
- 2) Please list your questions and allow sufficient space for answers below each individual question. Programmers often answer letters while waiting for printouts or listings. If all the information is on one sheet, it makes it easier for them to answer your questions.
- 3) If your question concerns one of your programs, please enclose a listing and a copy on disk, if possible. (Do NOT send copies of copyrighted software.)

## COMMERICAL LICENSES

Did you know that it is possible to purchase a commerical license for all OSS products? This license allows the owner to sell products which are created with OSS systems for commerical distribution.

Did you know that Bill Wilkinson, V.P. of Technical Development at OSS and author of a monthly column in COMPUTE!, has written a new book entitled THE ATARI BASIC SOURCE BOOK. Bill along with Kathleen O'Brien and Paul Laughton wrote the original Atari BASIC. The book provides a inside look at Atari BASIC and includes the original source code. Recommended for intermediate and advanced programmers, THE ATARI BASIC SOURCE BOOK published by COMPUTE!, should be available in your local book stores.

Also, Bill is featured in the January issue of ATARI CONNECTION. The article includes some information concerning Bill's background and 10 tips for becoming a better programmer.

DOS XL, the newest operating system produced by OSS, is being distributed with the disk drives produced by the following manufacturers: Indus, Astra, Percom and (by the time you read this, we hope) Trak.

All products currently produced by OSS are compatible with all Atari machines and will be compatible with the new 1450 XLD when it is released.

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#### PANDORA'S QUESTION BOX

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This is a new feature of the OSS NEWSLETTER. In each issue we will highlight a question or two that we are frequently asked. If you would like to see a particular question answered in this section, please send your question to: PANDORA'S QUESTION BOX, C/O OSS, 1173D S. SARATOGA/SUNNYVALE RD., SAN JOSE, CA 95129.

This month's questions: When I try to used INIT, DUPDSK, SDCOPY, COPY utilities I get an ERROR 2--MEMORY FULL. WHY?

ANSWER: When using the above utilities, you must remove the cartridge out in order to work properly.

Question: Why can't I get my FILE MANAGER 800 to LOAD with DOS XL?

ANSWER: There are a few programs on the market that cannot load using DOS XL. A solution which works on some of these programs is to hold down the select key while loading.

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#### BUGS! BUGS! BUGS!

##### MAC/65 BUGS:

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Please note the following patch was incorrectly given in the last newsletter! This is the correct patch--we promise!

The following patch allows the use of ';' to introduce a comment anywhere on a line. Apply this patch if you wish to have this feature:

```
C B857 < 20,A0, BB
C B9ED < 1D
C BA49 < C7,A9
```



Warmstart problem revisited:

If you do not use the RS232 driver (RS232.COM) with OS/A+ please ignore this section.

In the last newsletter a bug was reported in which OS/A+ erroneously left the system warmstart flag in the coldstart state after the boot process. Unfortunately, a bug in Atari's RS232 driver (RS232.COM) causes that driver to load improperly if the warmstart flag is set. Applying the warmstart patch in the last newsletter to either version 2 or 4 of OS/A+ will cause you to be unable to use the RS232 driver. Since the fix to this and other bugs in Atari's RS232 software is too extensive to explain in this space, DO NOT use the patch described in the last newsletter. Instead, if you wish to use the RS232 driver, just use the unpatched version. Also, this and other problems with Atari's driver have been fixed in our DOS XL software.

The following is not really a bug. However, we have had many requests for a patch to use Atari Writer with OS/A+:

```
From D1: prompt, type
      TYP E:  STARTUP.EXC [RETURN]
When screen clears, type
      CAR[RETURN]
      [CTRL]3
```

Then, the next time you boot that disk with the AtariWriter cartridge inserted, you will be sent to the cartridge and may perform all AtariWriter functions. Exception: if AtariWriter is used with version 4 of OS/A+, the disk inventory (disk directory) command will not work properly (because of the 30 character file names of version 4) nor can you format diskettes other than with a DOS command. All other functions work properly under version 4 or version 2, in single or double density (and even double sided, in the case of version 4).

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FOR CURRENT OWNERS OF ACTION!ACTION! CARTRIDGE BUGS & MANUAL ERRATA

Unfortunately, the ACTION! cartridge does have some bugs. Fortunately they are not serious ones and can be patched by inserting a few lines of ACTION! source code into your programs. Also, the manual contains both typographical and content errors. In presenting the bugs and errata to you we faced a dilemma: should we give short (possibly unclear) explanations and fixes in this newsletter, or should we ask you to send in for a list of the errata and bugs, including detailed explanations and fixes. We chose the latter for the simple reason that it will save us from answering innumerable calls about the 'fuzzy' explanations in the newsletter.

To get the 'bugs' letter, simply send a stamped (20 cent), self addressed envelope large enough for 8 1/2 by 11 paper to:

ACTION! BUGS  
OSS, Inc.  
1173D S. Saratoga Sunnyvale Rd.  
San Jose, CA 95129



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Phone orders also accepted 408-446-3099 for MasterCard, VISA or COD. To save shipping and handling charges, send check or money order.

\* Each cartridge comes with a manual. If you wish to order only a manual, you may do so for ACTION!, BASIC XL, and MAC/65 only. After reviewing the manual, should you decide to order the cartridge, you will receive a \$10.00 credit toward the purchase price.



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